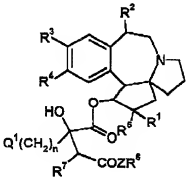
Claims

1. A new method of therapy using the subcutaneous mode of administration of formulations based upon harringtonines including their salts and tautomeric forms having the formula



where :

- R^1 is H, OH, OMe, O-(C_1-C_{30})-alkyl, O-aryl-(C_1-C_{30})-alkyl, O-(C_2-C_{30})-alkenyl, O-(C_3-C_{30})-cycloalkyl or null and

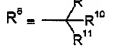
  R^2 is H or OH, or R^1, R^2 form together -O-,

  R^3 = R^4 = OMe or R^3 and R^4 form together -OCH_2O-,

- n is 0 to 8,

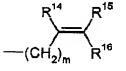
- R^6 is H, OH, OMe, O-(C_1-C_{30})-alkyl, O-aryl-(C_1-C_{30})-alkyl, O-(C_2-C_{30})-alkenyl, O-(C_3-C_{30})-cycloalkyl or O-aryl,

  Z = O, S, or NH, and

  R^6 = 

or Z- R^8 is $NR^{12}R^{13}$, R^{12} and R^{13} representing respectively R^9 and R^{10},

R^9, R^{10}, R^{11} are independently H, C_1-C_{30} alkyl, C_3-C_{30} cycloalkyl, aryl, aryl-(C_1-C_{30})-alkyl, C_2-C_{30} alkenyl, C_2-C_{30} alkynyl, C_1-C_{30}trihalogenoalkyl, C_1-C_{30}alkylamino-(C_1-C_{30})alkyl, C_1-C_{30} dialkylamino(C_1-C_{30})-alkyl, or amino-(C_1-C_{30})-alkyl, or

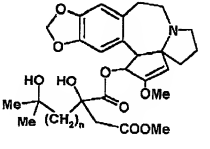


where R^{14}, R^{15}, R^{16} are independently H, halogen, C_1-C_{30} alkyl, C_3-C_{30} cycloalkyl, aryl, aryl-(C_1-C_{30})-alkyl, C_2-C_{30} alkenyl or C_2-C_{30} alkynyl, C_1-C_{30}trihalogenoalkyl, m is 0 to 4,

each of these groups including or not heteroatom(s).

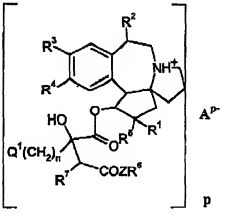
or their combination with another antitumor agent or a mixture of antitumor agents useful for the treatment of a disease in humans or animals, particularly cancers, leukemias, lymphomas, parasite diseases or chemotherapeutic resistance to other agents, in using a formulation specifically adapted for subcutaneous administration.

2. The method of claim 1 to 2 where the harringtonine is homoharringtonine or harringtonine having the following formula

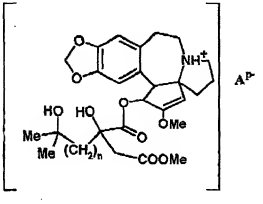


where n = 1 or 2

3. The method of claim 1 or 2 in which harringtonines are used under their salt forms having the following formula,



or, in particular the formula



where A^- is a mineral anion such as chlorid, sulfate, nitrate, perchlorate or an organic ion such as tartarate, malate, lactate, or a citrate and p is 1 or 2.

4. The method of claims 1 to 3 in which the acid which forms a salt of harringtonines is hydrochlorid acid or tartaric acid.

5. The method of therapy of claims 1 to 4 in which the harringtonines are solution or hydrophilic freeze-dried powder ready-to-reconstitute of buffered salt of homoharringtonine or harringtonine of which the level of chromatographic purity suitable for medical use is higher than 99.7 %

6. The method of therapy of claims 3 to 5 in which the pH of the formulation or constituted solution for injection is included between 5.5 and 8.

7. The method of therapy of claims 1 to 6 in which harringtonines are combined with another agent in the same injection.

8. The method of therapy of claim 7 in which the other agent is a nucleoside, preferably cytosine arabinoside

9. The method of therapy of claims 1 to 8 in which the subcutaneous mode of administration is performed by bolus injection at regular intervals such as one to four injection a day during 1 to n days for a cycle of n days, n being preferably 28.

10. The method of therapy of claims 1 to 8 in which the subcutaneous mode of administration is performed by continuous subcutaneous infusion.